NEW YORK STATE PUBLIC SERVICE COMMISSION
WATER QUALITY CERTIFICATION

Pursuant to: §401 of the Federal Water Pollution Control Act, 33 U.S.C. § 1341, and Article 10 of the New York Public Service Law

Certification Issued to: Deepwater Wind South Fork, LLC ("DWSF")

Location of Project

Deepwater Wind South Fork, LLC proposes the construction of a large-scale electric transmission project, located in the Town of East Hampton, Suffolk County.

Project Description

The South Fork Export Cable ("SFEC") is an alternating current ("AC") electric cable (138 kilovolt ("kV")) that will connect the South Fork Wind Farm ("SFWF"), located offshore in federal waters on the Outer Continental Shelf ("OCS"), to the existing mainland electric grid in the Town of East Hampton, Suffolk County, New York. The SFEC includes the submarine segment of the cable in New York State territorial waters ("SFEC-NYS"), the terrestrial underground segment of the cable ("SFEC-Onshore"), and a new interconnection facility ("SFEC-Interconnection Facility"). The SFEC-NYS, SFEC-Onshore, and SFEC-Interconnection Facility will hereafter be referred to collectively as "the Project."

The SFEC-NYS segment of the export cable will be buried beneath the seabed within State territorial waters from the boundary of New York State waters (three nautical miles ("nm") offshore) south of Wainscott Beach in East Hampton, New York. The SFEC-NYS transitions onshore under the beach located at a transition vault at the southern end of Beach Lane in the Town of East Hampton, New York. The SFEC-NYS is approximately 3.5 miles long from the boundary of New York State territorial waters to the sea-to-shore transition vault located on Beach Lane. The SFEC-Onshore is the terrestrial underground segment of the export cable from the sea-to-shore transition vault to the SFEC-Interconnection Facility where the SFEC will interconnect with the Long Island Power Authority ("LIPA") electric transmission and distribution system in the Town of East Hampton, New York. The SFEC-Onshore is approximately 4.1 miles long from the transition vault located on Beach Lane to the SFEC-Interconnection Facility, which is adjacent to the Long Island Power Authority's East Hampton Substation on Cove Hollow Road. The SFEC-Onshore will be located both in the public road rights-of-way ("ROW") (including Beach Lane, Wainscott Main Street, Sayre's Path, Wainscott Stone Road, and Wainscott Northwest Road) and in the Long Island Railroad ("LIRR") ROW. The SFEC-Interconnection Facility is a new onshore facility primarily located on the same parcel as the existing LIPA East Hampton Substation and consisting of a transformer and a 69 kV interconnection cable that will connect to the 69 kV bus in the existing LIPA East Hampton Substation in the Town of East Hampton, New York.

Certification

The New York State Public Service Commission hereby certifies pursuant to Section 401 of the Federal Water Pollution Control Act, 33 U.S.C. Section 1341(a)(1) and Article VII of the New York State Public Service Law that the Project, as conditioned herein, complies with applicable requirements of Sections 301, 302, 303, 306 and 307 of the Federal Water Pollution Control Act, as amended, and applicable New York State water quality standards, limitations, criteria and other requirements set forth in Parts 608.9(a), and 701 through 704 of Title 6 of New York Codes, Rules and Regulations ("NYCRR"), provided that all of the conditions listed herein are met. This Certification is issued in conjunction with the NYS Public Service Law Article VII Certificate of Environmental Compatibility and Public Need ("CECPN") sought by Deepwater Wind South Fork, LLC ("DWSF") in, and based on the record of, Case 18-T-0604.

Conditions

1. No in-water work shall commence until the necessary Conditions relating to such work contained in the CECPN and any Order in Case 18-T-0604 have been met to the satisfaction of the New York State Department of Public Service.

2. Construction, operation, maintenance, repair and decommissioning of the Project shall at all times be in conformance with (a) the Article VII Application in Case 18-T-0604 (as amended and supplemented), to the degree not superseded by the CECPN; (b) the approved Environmental Management and Construction Plan ("EM&CP"); (c) all conditions of approval of the CECPN and the EM&CP; (d) all conditions incorporated in any order approving any revisions to the EM&CP; (e) the Municipal Separate Storm Sewer System-approved Stormwater Water Pollution Prevention Plan; (f) all conditions of approval contained in this Certification, and (g) New York State Water Quality Standards necessary and appropriate for issuance of, and compliance with, this Certification.

3. DWSF shall provide a copy of this Certification to the U.S. Army Corps of Engineers and the NYSDEC, along with a copy of the Article VII Application, CECPN, and approved EM&CP, so that the U.S. Army Corps of Engineers and NYSDEC will have a complete record of the conditions that apply to this Project.

4. DWSF, LLC shall provide to all construction contractors performing work on the Project complete copies of this Certification, the CECPN, and the approved EM&CP.

5. No in-water seabed disturbing work, including jet trenching trials, shall occur between May 1 to June 30 and September 1 to November 15 in any year to avoid the risk for incidental take of Atlantic Sturgeon, except that DWSF may be permitted to perform some limited seabed disturbing work activities (i.e., diver clearance and maintenance of the horizontal directional drill ("HDD") exit pit, and backfill of the HDD exit pit) May 1 through May 15 and November 1 through November 15. If backfill of the HDD exit pit occurs May 1 through May 15 or November 1 through November 15, DWSF shall develop an Atlantic Sturgeon Monitoring and Impact Minimization Plan. Such Atlantic Sturgeon Monitoring and Impact Minimization Plan must meet the substantive requirements of 6 NYCRR Part 182, and shall be included as part of the EM&CP. DWSF shall provide the Atlantic Sturgeon Monitoring and Impact Minimization Plan to New York

State Department of Environmental Conservation ("NYSDEC") forty-five (45) days prior to filing of the EM&CP for NYSDEC's review and comment.

6. All water quality laboratory analyses required in this WQC must be conducted by a laboratory certified by the New York State Department of Health ("NYSDOH") Environmental Laboratory Approval Program ("ELAP"). DWSF shall use commercially reasonable efforts to request the most expedited turnaround time available for laboratory samples for locations along the SFEC-NYS. Analytical results for Total Suspended Solids and turbidity must be sent to the New York State Department of Public Service Staff ("DPS Staff") and NYSDEC as soon as received from the laboratory but no longer than within forty eight (48) hours of receipt. Exceedances of the TSS standard must be identified.

7. All drilling fluid additives must be water-based unless otherwise approved by DPS Staff in consultation with the NYSDEC. If a polymer-based additive is proposed, it must be indicated in the EM&CP with the corresponding materials safety data sheet containing eco-toxicity information and an approved NYSDEC Water Treatment Chemical Form. Petroleum-based additives are strictly prohibited.

8. Water quality standards set forth in 6 NYCRR Parts 701, 702, 703 and 704, and sections 301, 302, 303, 306, and 307 of the federal Clean Water Act (see 33 USC §§ 1311, 1312, 1313, 1313a, and 1317) shall not be contravened.

9. Exclusive of the portion of the cable installed via HDD, DWSF shall install the SFEC-NYS a minimum burial depth ("Burial Depth") of six (6) feet (measured from top of cable) below the existing seabed. Should the Burial Depth not be achieved during the initial pass of the cable installation tool that is best suited to achieve Burial Depth, DWSF shall perform up to two (2) additional passes with the installation tool, or other burial tool that complies with the requirements of the Certificate, unless (a) additional passes risk causing damage to the SFEC-NYS or the installation tool; or (b) due to geologic obstructions, additional passes would not increase the burial depth or risk causing cable exposure. DWSF shall use best efforts to micro-route the cable within the cable corridor to achieve Burial Depth during installation. If boulders are not identified during pre-construction surveys, and therefore micro-routing the cable is impracticable, DWSF shall, if required to increase the likelihood of achieving Burial Depth, relocate any encountered boulders within sixty-five feet (65) feet of the planned centerline of the cable. Where DWSF has relocated a boulder one (1) meter or more in diameter a distance of two meters or more from the location where it was initially encountered, DWSF shall provide notice to mariners, recreational fishermen, and NYSDEC-Licensed Fishermen in accordance with the requirements of the of the CECPN.

10. DWSF shall install the SFEC-NYS, exclusive of the HDD, using either simultaneous lay and burial or pre-lay and post-burial processes.

    a. The following processes may be used, individually or in combination, to install the SFEC-NYS, exclusive of the HDD: mechanical cutter, mechanical plow (which may include a jetting system), jet sled, jet trencher and/or controlled flow excavator.

11. DWSF may use a temporary cofferdam, gravity cell, or similarly-Commission-approved structure (collectively referred to as "Temporary Cofferdam"), or no structure around the HDD exit pit during

construction. Final details regarding whether a Temporary Cofferdam will be used, and, if so, the type, design, and installation method shall be included in the EM&CP. Any Temporary Cofferdam shall be fully removed and prior to the Project achieving commercial operation, but no later than thirty (30) days after the installation of the cable in NYS waters. If Temporary Cofferdam is used, DWSF shall provide notice of its location to mariners and recreational and NYSDEC-Licensed Fishermen in accordance with the CECPN, and any Temporary Cofferdam will be marked in accordance with applicable United States Coast Guard ("USG") requirements.

12. DWSF will use best efforts to avoid the use of cable protection if the actual burial depth achieved provides adequate protection. In areas where seabed conditions or geologic or topographic features, or utility crossings do not allow DWSF to achieve Burial Depth, DWSF is authorized, but not required, to use cable protection methods. Cable protection may include tapered engineered concrete mattresses, rock bags, crushed rock, or other appropriate protection method(s). DWSF shall install and maintain any necessary cable protection measures in a manner that provides the ability to maintain overtrawlability, to minimize shifting over time, and to avoid creating a discernable berm. DWSF shall not leave any portions of the cable exposed on the seabed without cable protection measures. As part of decommissioning, DWSF shall perform surveys of the cable protection measures and use best efforts to remove installed cable protection measures that are within two (2) feet of the seabed surface.

13. The following limits must be achieved for Total Suspended Solids ("TSS") one thousand five hundred (1,500) feet down current (based on tide direction) of sediment disturbing activities:

    a. Water Quality Standard: None from sewage, industrial waste or other wastes that will cause deposition or impair the waters for their best usages; and

    b. Guidance Value: 100 mg/L above ambient.

    Water quality monitoring shall be conducted during jet trench trials, jet trenching activities, cable installation, excavation of the HDD exit pit, pre-lay grapnel run and backfill of the HDD exit pit, and maintenance and decommissioning activities that involve disturbance of sediments. Maintenance and decommissioning activities that result in only minor disturbance of sediments, including: (i) anchor sweep; (ii) anchoring; (iii) placement of jack-up barge; (iv) hand jetting; or (v) other activities as determined by DPS Staff, in consultation with NYSDEC, shall not require water quality monitoring.

14. Visual observations of turbidity caused by underwater cable and HDD exit pit installation/backfill activities, pre-lay grapnel run operations, maintenance, and decommissioning activities must be conducted to ensure compliance with the narrative water quality standard in 6 NYCRR § 703.2, which states "No increase that will cause a substantial visible contrast to natural conditions."

15. DWSF shall implement, the Suspended Sediment and Water Quality Monitoring Plan ("SSWQP") as required in the CECPN. Suspended sediment plume monitoring and water quality monitoring shall be conducted at the locations and frequency set forth in SSWQP.

16. If any jet trenching technology is used to lay the cable, trials must be conducted within representative

sections or areas proximate to the proposed underwater cable route in NYS waters prior to cable installation to ensure compliance with the TSS threshold limits as defined above. The trial will include approximately one thousand (1,000) feet of jet trenching operations within an area to be specified in the Jet Trencher Trial Plan in the EM&CP. The following conditions apply to jet trencher trials:

a. A combination of calibrated acoustic ("ADCP") and optical backscatter ("OBS") instruments will be used to measure water column TSS and turbidity on selected transects. Companion water samples will be collected and analyzed by a NYSDOH ELAP certified laboratory for TSS and turbidity during jet trencher trials;

b. DWSF must work cooperatively with DPS Staff and NYSDEC to immediately review the results of the real-time data measurements during the jet trencher installation trials to evaluate whether the operating conditions result in TSS concentrations that exceed the TSS threshold limit;

c. If the jet trencher trials demonstrate that the operating conditions result in TSS concentrations that exceed the TSS threshold limit established herein, DWSF must work with DPS Staff and NYSDEC to evaluate and implement feasible modifications to the jet trencher operating conditions to further reduce in-situ sediment re-suspension associated with the jet trencher installation procedure; and

d. Jet trencher operations must not proceed until the results of the Jet Trencher Trial Plan is reviewed and accepted by DPS Staff and NYSDEC. Review of this information by DPS and NYSDEC staffs shall not unreasonably delay the commencement of installation of the underwater cable system.

17. The following conditions apply if jet trenching technology is used to install the cable:

a. DWSF must operate the jet trencher in accordance with the operating conditions determined through jet trencher trials to maintain the suspension of in-situ sediments within the TSS limits;

b. Midline buoys or alternative measures shall be employed to minimize sediment disturbance caused by cable sweep;

c. If, during jet trencher installation of the cable, TSS concentrations exceed the established TSS limits, DPS Staff, NYSDEC Staff, and the Aquatic Environmental Monitor (described in the conditions to the CECPN) shall be immediately notified and work shall cease. DWSF shall immediately implement one or more of the following measures after consultation with DPS Staff, NYSDEC Staff, and the Aquatic Environmental Monitor: changing the rate of advancement of the jet trencher; modifying or varying hydraulic jetting pressures; or implementing other reasonable operational controls that may reduce suspension of in-situ sediments, but not in a manner that would materially delay the progress of work to complete the jet trencher installation procedure. Prior to re-commencement of work, DPS Staff, in consultation with NYSDEC, must authorize the jet-trencher operation mitigation measures; and

d. During implementation of corrective actions, DPS Staff, in consultation with NYSDEC, may specify additional monitoring until compliance with Water Quality Standards is demonstrated. DWSF shall adhere to the additional monitoring requirements until resumption of routine monitoring is authorized by DPS Staff in consultation with NYSDEC.

18. The following conditions shall be applied to minimize sediment released into the water column during excavation and backfilling of the HDD exit pit:

    a. The environmental monitor shall inspect all excavating and backfilling equipment prior to use and shall perform periodic inspections of all such equipment no less than once per week when in use. The DWSF shall demonstrate to the environmental monitor that the equipment operator has sufficient control over the bucket operation so that the sediment re-suspension from bucket contact with the bottom and bucket over-filling is minimized.

    b. Excavated material is to be recovered to a barge and shall not be sidecasted. DWSF shall:

        i. only use barges in good operating condition;
        ii. not use deck barges, unless modified to allow no barge overflow and as approved by the Environmental Monitor and DPS Staff in consultation with NYSDEC;
        iii. use barges or scows of solid hull construction or which are sealed;
        iv. use a closed (i.e., sealed) environmental (e.g., clamshell) bucket with sealing gaskets or an overlapping sealed design at the jaws and seals or flaps positioned at locations of vent openings to minimize sediment suspension;
        v. ensure that seals or flaps designed or installed at the jaws and locations of vent openings tightly cover these openings while the bucket is lifted through the water column and into the barge;
        vi. equip the closed environmental (e.g., clamshell) bucket with sensors to ensure complete closure of the bucket before lifting through the water;
        vii. operate the bucket so as to control the rate of the descent and to maximize the depth of penetration without overfilling the bucket;
        viii. control bucket retrieval rates to minimize turbidity;
        ix. lower the bucket to the level of the barge gunwales prior to release of the load and place the excavated material deliberately and in a controlled manner;
        x. suspend operations until any necessary repairs or replacements are made when a significant loss of water and visible sediments from the bucket is observed;
        xi. avoid washing the gunwales of the scow except to the extent necessary to ensure the safety of workers;
        xii. not overflow the barge; and
        xiii. DWSF shall allow a minimum twenty-four (24) hours of settlement prior to decanting barges. Decanting of barges may not commence until approved by DPS Staff, in consultation with NYSDEC.

    c. DWSF shall not use a dragline for excavation.

d. DWSF shall not use airlift, controlled flow excavation, and/or suction dredging except in instances where bucket excavation would endanger the HDD borehole, the HDD conduit, the SFEC-NYS cable or installation equipment.

e. DWSF may install permanent concrete mattresses, rock bags, or other alternative means of protection of the conduit and/or cable within the HDD exit pit, provided that DWSF shall cover such protection measures with three (3) feet of material excavated from the HDD exit pit or similar material from upland sources. Additional details regarding such cable protection measures shall be provided in the EM&CP. Prior to filing the EM&CP, DWSF shall consult with DPS, NYSDEC, and New York State Department of State ("NYSDOS") regarding cable protection measures.

f. No later than three (3) months following the Commercial Operation Date, exclusive of the construction windows described herein, DWSF shall backfill the HDD exit pit to ensure that there is no discernible trough.

g. During excavation and backfill of the HDD exit pit, DWSF shall provide to DPS Staff, NYSDEC, NYSDOS, the Town of East Hampton ("Town'), and the Trustees of the Freeholders and Commonalty of the Town of East Hampton ("Trustees"), weekly progress reports that demonstrate compliance with CECPN requirements and such other information as determined necessary based on consultation with DPS Staff, NYSDEC, and NYSDOS.

19. Following excavation of the SFEC-NYS HDD exit pit, DWSF shall displace the dredged material to a barge. If the material is not contaminated, and if the backfill of the HDD exit pit occurs prior to May 15th of the first year of construction that HDD work is commenced, the dredged material must be used as the top three feet of backfill for the HDD exit pit. If DWSF cannot backfill the HDD exit pit by such date, or if dredged material is contaminated, DWSF may use clean material of similar grain size to the dredged material, and shall consult with NYSDEC, NYSDOS, and DPS Staff on the source of such fill prior to use. If material to be dredged is contaminated, prior to dredging, DWSF shall identify the final dredged material disposal location, including a letter from the permitted disposal facility verifying that they will accept the material. All contaminated material shall be handled in accordance with the Final Hazardous Waste and Petroleum Work Plan and Materials Management Plan submitted as part of the EM&CP. For any excavated material not used as backfill, the final material disposal location must be submitted to DPS Staff, the Town, Trustees, and NYSDEC at least thirty (30) days prior to disposal. Disposal of all material must comply with 6 NYCRR Part 360 et seq.

20. During pre-lay grapnel run operations, cable installation, excavation of the HDD exit pit, and backfill of the HDD exit pit, if any TSS standards concentrations are exceeded at the edge of the 1,500-foot mixing zone, work must immediately cease until corrective action is implemented. If corrective action does not restore compliance, that action shall cease until a solution acceptable to DPS Staff and NYSDEC is developed.

21. The environmental monitor(s) shall have stop work authority over aspects of the Project that could violate the terms of the WQC, CECPN, or the EM&CP.

22. Within four (4) months of completion of the excavation of the HDD exit pit, DWSF must submit a report summarizing the results of the excavation of the HDD exit pit, water quality monitoring, and excavated material management operations. The report shall include:

    a. Location and extent of excavation;

    b. Total amount of material excavated;

    c. Ultimate placement location of excavated material;

    d. Water quality monitoring results and corrective actions (as-needed) taken; and

    e. Documentation of follow-up testing/observations.

23. Within four (4) months of the completion of SFEC-NYS cable installation, DWSF must file with the Secretary of the Public Service Commission an analysis comparing the actual water quality monitoring results obtained during installation with any model predictions previously provided in support of the Project.

Certified by:

11.22.21
Date

Tammy Mitchell
Director - Office of Electric, Gas and Water
New York State Department of Public Service
Three Empire State Plaza
Albany, New York 12223-1350